



ISO 9001  
Certificate



ISO 14001  
Certificate



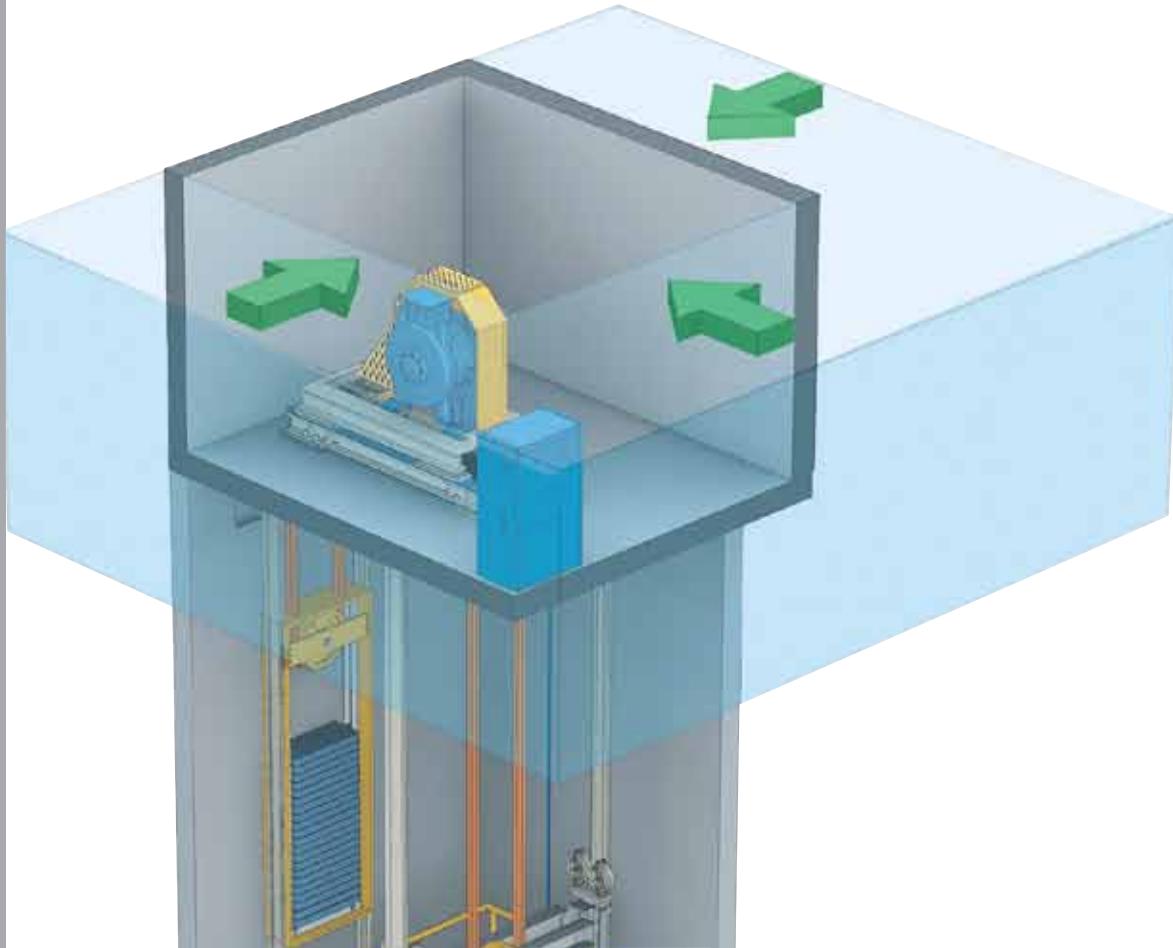
**SIGMA**

Your Elevator Partner  
[www.sigmaelevators.com](http://www.sigmaelevators.com)

SIGMA constantly endeavors to improve products. Please be reminded that information in this catalog is subject to change without prior notice.  
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# iris<sup>TM</sup> NV

PM Gearless Elevator



Your Elevator Partner... SIGMA

## **SIGMA** Ride tomorrow, Lift future



### **Korean Engineered Products**

SIGMA products are engineered by highly qualified Korean engineers and ensure customers to receive excellent products with reliable quality.



### **Aesthetics Design Excellence**

SIGMA's Design Center in Korea and China are fully equipped with professionals who follow the most up-to-date aesthetic designs to satisfy customers needs.



### **Global Network**

SIGMA has been with you for more than 45 years serving over 60 Countries.



SIGMA has already exported approximately 100,000 elevators  
**worldwide since year 1978**

● SIGMA SUBS ● DISTRIBUTORS



Khalid Al Attar Tower  
UAE



Al Rames Tower  
Qatar



Darwaza Tower  
Kuwait



Vorobiev Gory  
Russia



Triumph Palace  
Russia



Antey  
Russia



Sheraton Hotel  
Puerto Rico



Baiyoke Tower  
Thailand



Grand Hyatt Hotel  
Indonesia



Emerald Tower  
Kazakhstan



LG Beijing Tower  
China



ASEM Tower  
Korea



Intercontinental Hotel  
Korea



Korea World Trade Center  
Korea



Plaza La Castellana  
Venezuela



Torre Global Bank  
Panama



Ocean Two  
Panama



**iris™ NV**

**PM Gearless Machine & Drives:**  
technologies that deliver a greener future

**IRIS NV enhancing the value of the building...**

IRIS NV maximizing energy savings

IRIS NV enabling environment protections

IRIS NV pursuing space savings

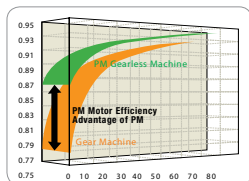
IRIS NV providing ride comfort

IRIS NV ensuring safety & reliability



### Space Saving

Customers may benefit from the 46 percent space smaller size of the IRIS NV PM gearless machine. IRIS NV enables architects to design building structure flexibly and use building space more efficiently.



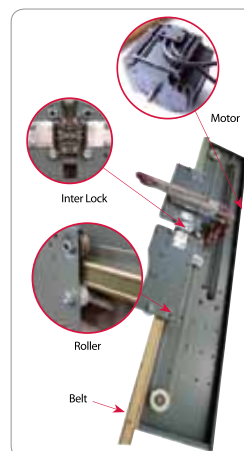
### Energy Saving

By using permanent magnet (PM) synchronous motor, IRIS NV improves motor efficiency. The compact motor design of IRIS NV enables lower initial electricity load and power consumption. It also allows IRIS NV to reduce heat from the motor.



### Ride Comfort

The absence of a gearbox allows the elimination of noise from gear friction. Its coaxial transmission also reduces vibration and noise efficiently. In addition, the VVVF (Variable Voltage Variable Frequency) controller enables even lower noise and smoother operation of the elevator.



### Smooth and Fast Door Control

The PM synchronous motor, also used for the PM door system of IRIS NV, ensures a higher efficiency in the door operating system.

It helps IRIS NV not only to save energy, but also to show better performance in response time, speed, position control, etc.

# Higher Quality in Your Life PM Gearless Technology

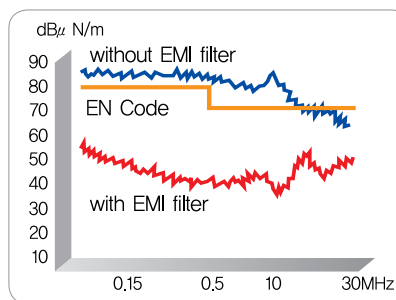
Green Future in Your Life

# Green Technology



## Lubrication Free

The gearless machine, IRIS NV, does not need any lubrication to maintain the machine. The gearless technology helps to save about 1,400 liters of oil through the life-time of the elevator.



<Interference Graph>

## Interference Prevention

The control panel with EMI filter prevents interference for electrical facilities. The effect of EMI filter meets or exceeds the worldwide standards on exposure to electromagnetic radiation.



<Regeneration>

## Regen System (Option)

ReGen drives significantly reduces energy demand and lowers overall building energy costs.

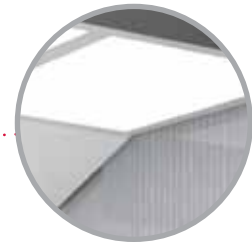
## e\*route (Option)

e\*route enables passengers to reach their destinations up to 55 percent faster, reducing waiting time and avoiding congestion. Moreover, the efficiency in elevator transportation reduces the number of elevators needed, hence it leads to reducing construction cost. e\*route contributes to greener environment as it reduces electrical energy consumption with its high operation efficiency.



# Modern | Elevator Design |

Simple stripe pattern of Tangent is the basic design, preferred by many people



**| C-RS1 |**

One side of ceiling is lifted,  
so the space is increased




**| Front View |**

**| Rear View |**

## Specification

CEILING	C-RS1
COP	CBX-22C
CAR DOOR FINISH	EH1-084
HANDRAIL	HR04-38HL
FLOOR	Decotile

 The actual product can be different (changed) depending on design  
Car wall image can be different (changed) depending on capacity

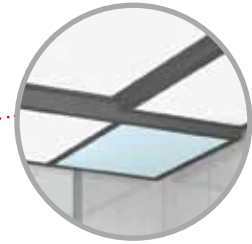


# Mondrian | Elevator Design |

Mondrian shows the beautiful appearance with its colorful light and quiet pattern of wall



| Front View |



| C-RS2 |

The acryl ceiling in Mondrian look brightens the space and provides the artistic atmosphere



| Rear View |

## Specification

CEILING	C-RS2
COP	CBX-22C
CAR WALL FINISH	EH3-034
HANDRAIL	HR04-38HL
FLOOR	Decotile



The actual product can be different (changed) depending on design  
Car wall image can be different (changed) depending on capacity

# Tangent

| Elevator Design |

The basic design, the car with simple and quiet beige color, harmonizes well with any building design



**| C-NL2 |**

The center of the ceiling is mounted,  
and the car space looks wider




**| Front View |**

**| Rear View |**

## Specification

CEILING	C-NL2
COP	CBX-22C
CAR WALL FINISH	EH1-086
HANDRAIL	HR04-38POL
FLOOR	Decotile

 The actual product can be different (changed) depending on design  
Car wall image can be different (changed) depending on capacity

# Plain | Elevator Design |

Plain provides the comfortable outlook with its pattern of nature



| Front View |



| C-RL2 |


The air purifier system cleans and deodorizes the air in the car.



| Rear View |

## Specification

CEILING	C-RL2
COP	CBX-22C
CAR WALL FINISH	EH1-085
HANDRAIL	HR04-38HL
FLOOR	Decotile

 The actual product can be different (changed) depending on design  
Car wall image can be different (changed) depending on capacity

## Entrance Design

### | Ground Floor



<b>JAMB FINISH</b>	J-311 (Stainless Steel Mirror Finish)
<b>DOOR FINISH</b>	Stainless Steel Mirror Etching Finish (EH1-085)
<b>HALL IND</b>	HIX-A162
<b>HALL LANTERN</b>	HLV-C08
<b>HALL BUTTON</b>	HBM-R45

### | Ground Floor



<b>JAMB FINISH</b>	J-311 (Stainless Steel Hairline Finish)
<b>DOOR FINISH</b>	Stainless Steel Hairline Etching Finish (EW2-084)
<b>HALL IND</b>	HIX-A122
<b>HALL LANTERN</b>	HLV-C08
<b>HALL BUTTON</b>	HBM-R45

### | Typical Floors (Option)



<b>JAMB FINISH</b>	J-301 (Stainless Steel Hairline Finish)
<b>DOOR FINISH</b>	Stainless Steel Hairline Etching Finish (EH3-034)
<b>HALL IND &amp; BUTTON</b>	VIX-M652

### | Typical Floors



<b>JAMB FINISH</b>	J-101 (Stainless Steel Hairline Finish)
<b>DOOR FINISH</b>	Stainless Steel Hairline
<b>HALL IND &amp; BUTTON</b>	VIX-M652



The actual product can be different (changed) depending on design

## Car & Landing Fixtures |

### | COP



CBM-22



CBX-22C

### | Vertical Hall Indicator



VIX-M652



VIX-MA52S

### | Handicapped COP



CBM-44SH

### | Hall Button



HBM-R45



HBM-RA5S



HBM-R65

 The actual product can be different (changed) depending on design



## Car & Landing Fixtures || (Option)

### | COP



CBM-16



CBX-16C

### | Vertical Hall Indicator



VIX-M692



VIX-MA92S

### | Hall Button



HBM-S49



HBM-SA9S

## Car & Landing Fixtures III (Option)

### I COP



CBL-85C

CBT-70C

### I Horizontal Hall Indicator



HIL-C193



HIL-A193

### I Vertical Hall Indicator



VIL-MBB2S

### I Hall Button



HBM-RBBS

### I Handicapped COP



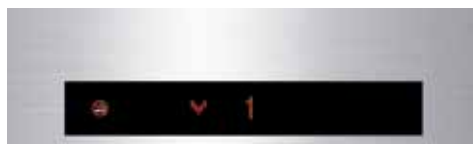
CBM-D1SH

 The actual product can be different (changed) depending on design

## Car Position Indicator



CIX-10



CIX-13

## Horizontal Hall Indicator



HIX-A162



HIX-C162

## Hall Lantern



HLV-C08



HLV-C11



HLV-C48

## Ceiling Designs



C-RS1 (LGP-945)



C-RS2 (LGP-945)



C-NS3



C-VS2



C-NL2 (LGP-945) [Option]



C-RL1 [Option]



(Including Air Purifier)



C-RL2 [Option]



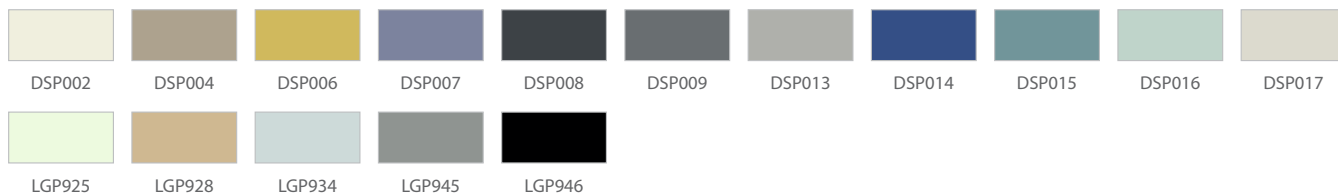
C-LA01 [Option]



C-LN01 [Option]

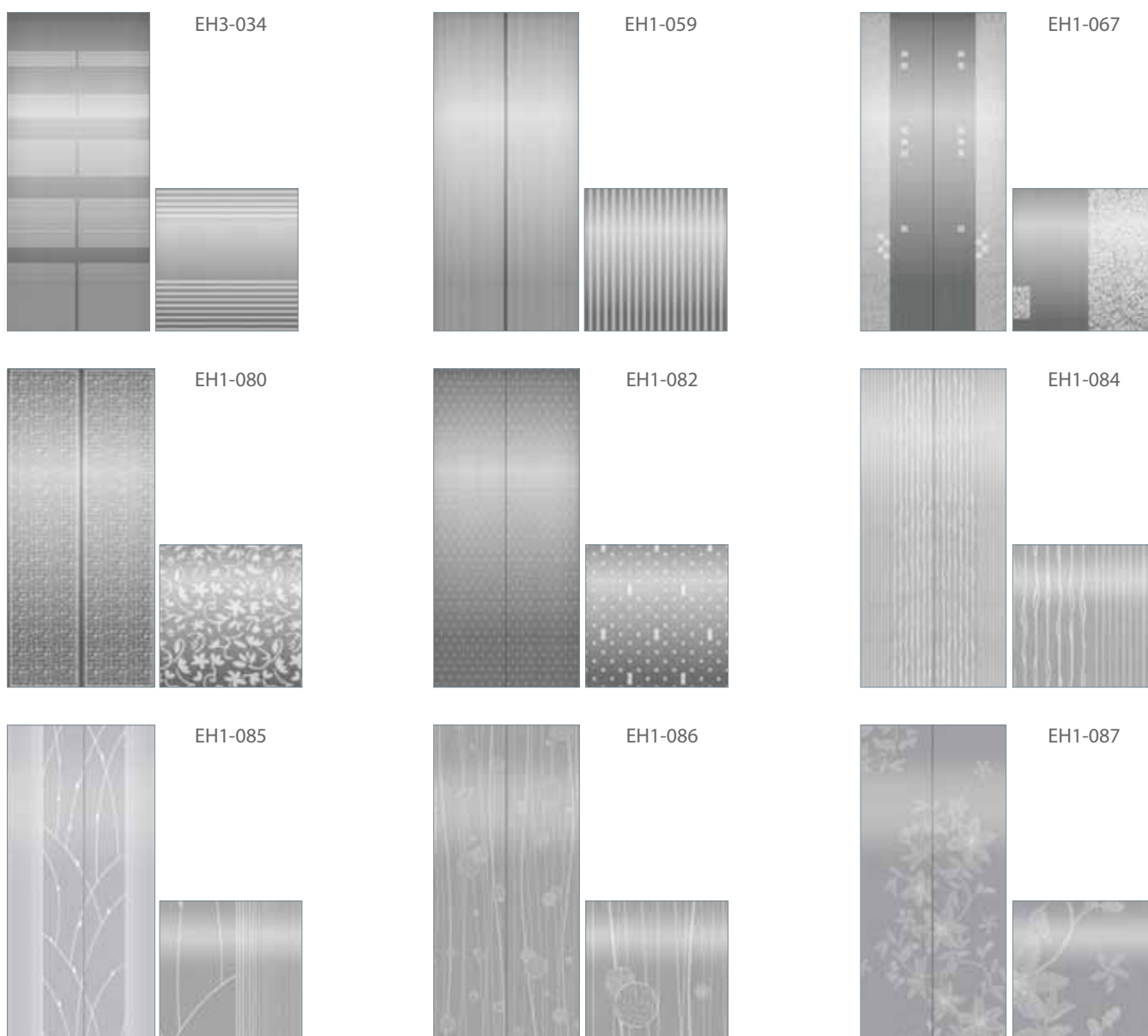
 The actual product can be different (changed) depending on design

## Colors



## Etching Pattern

### I STS Etching Pattern



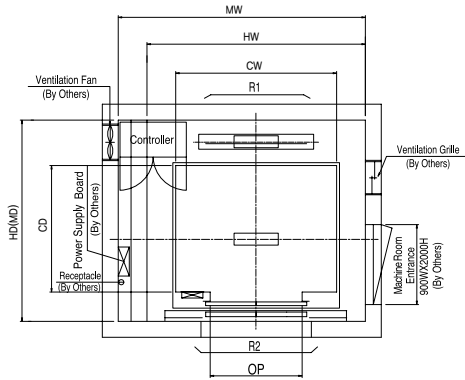
 The actual product can be different (changed) depending on design



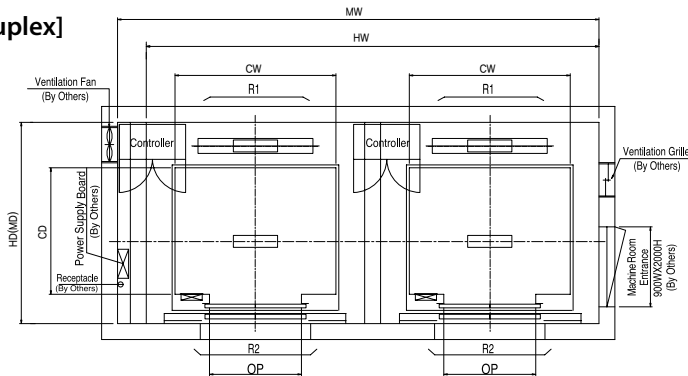
## Technical Data

### I Hoistway & Machine Room Plan

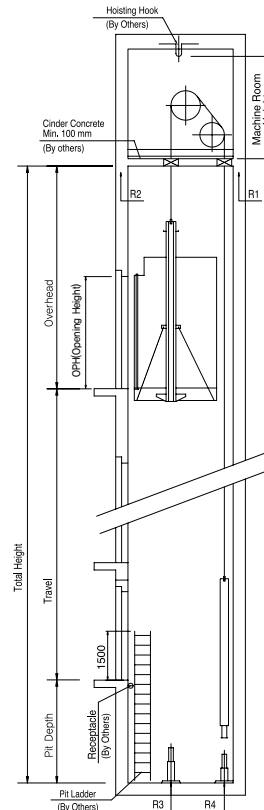
#### [Simplex]



#### [Duplex]



### I Hoistway Section



### I Overhead, Pit & Machine Room Height

Application Regulation [CODE]	Speed (m/s)	Load (kg)	Travel (mm)	Overhead (mm)	Pit Depth (mm)	Machine Room HT	Required Hook Strength (kg)
Standard / EN	1	450~1000	Travel≤100	4200	1400	2300	3000
		1350	Travel≤100	4300			4500
		1150/1600	Travel≤80	4300			
	1.5	450~1000	80<Travel≤100	4650	1450		3000
		1350	Travel≤100	4400			4500
		1150/1600	Travel≤80	4400			
	1.75	450~1000	80<Travel≤100	4750	1600		3000
		1350	Travel≤100	4500			4500
		1150/1600	Travel≤80	4500			
MS2021	1	410~1025	Travel≤100	4200	1400	2550	3000
		1365	Travel≤100	4300		2400	4500
		1160/1365	Travel≤80	4300			
	1.5	410~1025	80<Travel≤100	4650	1450	2550	3000
		1365	Travel≤100	4400		2400	4500
		1160/1365	Travel≤80	4400			
	1.75	410~1025	80<Travel≤100	4750	1600	2550	3000
		1365	Travel≤100	4500		2400	4500
		1160/1365	Travel≤80	4500			
Standard / EN	2	800~1600	Travel≤130	5100	1900	2300	4500
	2.5			5300	2200		

# Technical Data

## I Layout Dimensions | Speed : 1.0 m/s

[Standard]

(Unit : mm)

Speed (m/s)	Capacity		Opening Width (mm)	Car Size		Hoistway Size				Machine Room Size				Reaction Load			
						Simplex		Duplex		Simplex		Duplex		Machine Room		Pit	
	Person	Load(kg)		CW	CD	HW	HD	HW	HD	MW	MD	MW	MD	R1	R2	R3	R4
1.0	6	450	800	1400	850	1800	1500	3750	1500	1800	1500	3750	1500	3600	2000	3800	3150
	8	550	800	1400	1030	1800	1700	3750	1700	1800	1700	3750	1700	4050	2500	4550	3350
	9	600	800	1400	1130	1800	1750	3750	1750	1800	1750	3750	1750	4100	2500	4700	3450
	10	680	800	1400	1250	1800	1900	3750	1900	1800	1900	3750	1900	4200	2850	5000	3650
	11	750	800	1400	1350	1800	2000	3750	2000	1800	2000	3750	2000	4550	2900	5200	3750
	13	900	900	1600	1350	2000	2000	4150	2000	2000	2000	4150	2000	5100	3800	6300	4500
	15	1000	900	1600	1500	2000	2150	4150	2150	2000	2150	4150	2150	5450	4300	6600	4700
	17	1150	1000	1800	1500	2350	2200	4850	2200	2350	2200	4850	2200	8000	5200	9550	7150
			1100	2000	1350	2550	2050	5250	2050	2550	2050	5250	2050				
	20	1350	1000	1800	1700	2350	2400	4850	2400	2350	2400	4850	2400	8900	6000	10200	7500
			1100	2000	1500	2550	2200	5250	2200	2550	2200	5250	2200				
	24	1600	1100	2000	1750	2550	2450	5250	2450	2550	2450	5250	2450	10200	7000	10950	8700
				2150	1600	2700	2300	5550	2300	2700	2300	5550	2300				

[EN Code]

1.0	6	450	700	1150	1030	1800	1700	3750	1700	1800	1700	3750	1700	3600	2000	3800	3150
	7	525	800	1400	1030	1800	1700	3750	1700	1800	1700	3750	1700	4050	2500	4550	3350
	8	600	800	1400	1100	1800	1750	3750	1750	1800	1750	3750	1750	4100	2500	4700	3450
	9	680	800	1400	1250	1800	1900	3750	1900	1800	1900	3750	1900	4200	2850	5000	3650
	10	800	800	1400	1350	1800	2000	3750	2000	1800	2000	3750	2000	4550	2900	5200	3750
	12	900	900	1600	1350	2000	2000	4150	2000	2000	2000	4150	2000	5100	3800	6300	4500
	13	1000	900	1600	1500	2000	2150	4150	2150	2000	2150	4150	2150	5450	4300	6600	4700
	16	1150	1000	1800	1500	2350	2200	4850	2200	2350	2200	4850	2200	8000	5200	9550	7150
			1100	2000	1350	2550	2050	5250	2050	2550	2050	5250	2050				
	18	1350	1000	1800	1700	2350	2400	4850	2400	2350	2400	4850	2400	8900	6000	10200	7500
			1100	2000	1500	2550	2200	5250	2200	2550	2200	5250	2200				
	21	1600	1100	2000	1750	2550	2450	5250	2450	2550	2450	5250	2450	10200	7000	10950	8700
				2150	1600	2700	2300	5550	2300	2700	2300	5550	2300				

[Malaysia]

1.0	6	410	800	1400	830	1800	1500	3750	1500	1800	1500	3750	1500	3600	2000	3800	3150
	8	545	800	1400	1030	1800	1700	3750	1700	1800	1700	3750	1700	4050	2500	4550	3350
	9	615	800	1400	1150	1800	1800	3750	1800	1800	1800	3750	1800	4100	2500	4700	3450
	10	685	800	1400	1250	1800	1900	3750	1900	1800	1900	3750	1900	4200	2850	5000	3650
	11	750	800	1400	1350	1800	2000	3750	2000	1800	2000	3750	2000	4550	2900	5200	3750
	13	885	900	1600	1350	2000	2000	4150	2000	2000	2000	4150	2000	5100	3800	6300	4500
	15	1025	900	1600	1550	2000	2200	4150	2200	2000	2200	4150	2200	5450	4300	6600	4700
	17	1160	1000	1800	1500	2350	2200	4850	2200	2350	2200	4850	2200	8000	5200	9550	7150
	20	1365	1000	1800	1750	2350	2450	4850	2450	2350	2450	4850	2450	8900	6000	10200	7500
			1100	2000	1550	2550	2250	5250	2250	2550	2250	5250	2250				
	24	1635	1100	2000	1800	2550	2500	5250	2500	2550	2500	5250	2500	10200	7000	10950	8700

# Technical Data

I Layout Dimensions | Speed : 1.5, 1.75 m/s

[Standard]

(Unit : mm)

Speed (m/s)	Capacity		Opening Width (mm)	Car Size		Hoistway Size				Machine Room Size				Reaction Load			
						Simplex		Duplex		Simplex		Duplex		Machine Room		Pit	
	Person	Load(kg)		CW	CD	HW	HD	HW	HD	MW	MD	MW	MD	R1	R2	R3	R4
1.5 ~ 1.75	8	550	800	1400	1030	1800	1700	3750	1700	1800	1700	3750	1700	4200	2800	7150	5300
	9	600	800	1400	1130	1800	1750	3750	1750	1800	1750	3750	1750	4500	3100	7500	5500
	10	680	800	1400	1250	1800	1900	3750	1900	1800	1900	3750	1900	4900	3400	8150	5900
	11	750	800	1400	1350	1800	2000	3750	2000	1800	2000	3750	2000	5250	3700	8600	6150
	13	900	900	1600	1350	2000	2000	4150	2000	2000	2000	4150	2000	5750	4100	9850	6900
	15	1000	900	1600	1500	2000	2150	4150	2150	2000	2150	4150	2150	6150	4300	10550	7300
	17	1150	1000	1800	1500	2350	2200	4850	2200	2350	2200	4850	2200	9400	7750	15450	11500
			1100	2000	1350	2550	2050	5250	2050	2550	2050	5250	2050				
	20	1350	1000	1800	1700	2350	2400	4850	2400	2350	2400	4850	2400	10000	8250	16850	12300
			1100	2000	1500	2550	2200	5250	2200	2550	2200	5250	2200				
	24	1600	1100	2000	1750	2550	2450	5250	2450	2550	2450	5250	2450	11500	8700	18550	13300
				2150	1600	2700	2300	5550	2300	2700	2300	5550	2300				

[EN Code]

1.5 ~ 1.75	7	525	800	1400	1030	1800	1700	3750	1700	1800	1700	3750	1700	4200	2800	7150	5300
	8	600	800	1400	1100	1800	1750	3750	1750	1800	1750	3750	1750	4500	3100	7500	5500
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	10	800	800	1400	1350	1800	2000	3750	2000	1800	2000	3750	2000	5250	3700	8600	6150
	12	900	900	1600	1350	2000	2000	4150	2000	2000	2000	4150	2000	5750	4100	9850	6900
	13	1000	900	1600	1500	2000	2150	4150	2150	2000	2150	4150	2150	6150	4300	10550	7300
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			1100	2000	1350	2550	2050	5250	2050	2550	2050	5250	2050				
	18	1350	1000	1800	1700	2350	2400	4850	2400	2350	2400	4850	2400	10000	8250	16850	12300
			1100	2000	1500	2550	2200	5250	2200	2550	2200	5250	2200				
	21	1600	1100	2000	1750	2550	2450	5250	2450	2550	2450	5250	2450	11500	8700	18550	13300
				2150	1600	2700	2300	5550	2300	2700	2300	5550	2300				

[Malaysia]

1.5 ~ 1.75	8	545	800	1400	1030	1800	1700	3750	1700	1800	1700	3750	1700	4200	2800	7150	5300
	9	615	800	1400	1150	1800	1800	3750	1800	1800	1800	3750	1800	4500	3100	7500	5500
	10	685	800	1400	1250	1800	1900	3750	1900	1800	1900	3750	1900	4900	3400	8150	5900
	11	750	800	1400	1350	1800	2000	3750	2000	1800	2000	3750	2000	5250	3700	8600	6150
	13	885	900	1600	1350	2000	2000	4150	2000	2000	2000	4150	2000	5750	4100	9850	6900
	15	1025	900	1600	1550	2000	2200	4150	2200	2000	2200	4150	2200	6150	4300	10550	7300
	17	1160	1000	1800	1500	2350	2200	4850	2200	2350	2200	4850	2200	9400	7750	15450	11500
	20	1365	1000	1800	1750	2350	2450	4850	2450	2350	2450	4850	2450	10000	8250	16850	12300
			1100	2000	1550	2550	2250	5250	2250	2550	2250	5250	2250				
	24	1635	1100	2000	1800	2550	2500	5250	2500	2550	2500	5250	2500	11500	8700	18550	13300

## Technical Data

### I Layout Dimensions | Speed : 2.0, 2.5 m/s

[Standard]

(Unit : mm)

Speed (m/s)	Capacity		Opening Width (mm)	Car Size		Hoistway Size				Machine Room Size				Reaction Load			
						Simplex		Duplex		Simplex		Duplex		Machine Room		Pit	
	Person	Load(kg)		CW	CD	HW	HD	HW	HD	MW	MD	MW	MD	R1	R2	R3	R4
2.0 ~ 2.5	11	750	800	1400	1350	1950	2050	4050	2050	1950	2050	4050	2050	11000	7550	12300	9500
	13	900	900	1600	1350	2150	2050	4450	2050	2150	2050	4450	2050	11000	7550	13000	9900
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	15	1000	900	1600	1400	2150	2100	4450	2100	2150	2100	4450	2100	11650	7850	13900	10500
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	24	1600	1100	1500	2300	2400	2750	4950	2750	2400	2750	4950	2750	13900	9350	17400	12500

[EN Code]

2.0 ~ 2.5	10	800	800	1400	1350	1950	2050	4050	2050	1950	2050	4050	2050	11000	7550	12300	9500
	12	900	900	1600	1350	2150	2050	4450	2050	2150	2050	4450	2050	11000	7550	13000	9900
	13	1000	900	1600	1500	2150	2200	4450	2200	2150	2200	4450	2200	11650	7850	13900	10500
	13	1000	900	1600	1400	2150	2100	4450	2100	2150	2100	4450	2100	11650	7850	13900	10500
	15	1150	1000	1800	1500	2350	2200	4850	2200	2350	2200	4850	2200	12300	8250	14800	11000
	18	1350	1000	1800	1700	2350	2400	4850	2400	2350	2400	4850	2400	13100	8850	15900	11600
	18	1350	1000	1300	2300	2250	2750	4650	2750	2250	2750	4650	2750	13100	8850	15900	11600
	21	1600	1100	2000	1750	2550	2450	5250	2450	2550	2450	5250	2450	13900	9350	17400	12500
	21	1600	1100	2100	1600	2650	2300	5450	2300	2650	2300	5450	2300	13900	9350	17400	12500
	21	1600	1100	1500	2300	2400	2750	4950	2750	2400	2750	4950	2750	13900	9350	17400	12500

# Technical Data

## I Power Supply Plan [Speed : 1.0 ~ 2.5 m/s]

(220V / 380V)

Speed (m/s)	Capacity		Motor Capacity (kW)	MCCB Capacity of Building(A)		Power Supply Capacity(kVA)		Lead-in Wire Size(mm <sup>2</sup> )		Earth Wire Size(mm <sup>2</sup> )		Heat Output (kcal/H)	Starting Power (kVA/set)
	Person	Load(kg)		Simplex	Duplex	Simplex	Duplex	Simplex	Duplex	Simplex	Duplex		
1.0	6	450	4.6	25 / 25	25 / 32	5.3 / 5.3	9.7 / 9.7	10 / 6	16 / 6	10 / 6	16 / 6	675	10.0
	8	550	4.6	25 / 25	25 / 40	5.9 / 5.9	10.8 / 10.8	10 / 6	25 / 6	10 / 6	16 / 6	825	10.0
	9	600	4.6	25 / 25	25 / 50	6.3 / 6.3	11.5 / 11.5	10 / 6	25 / 6	10 / 6	16 / 6	900	10.0
	10	680	5.5	32 / 25	32 / 50	7.3 / 7.3	13.4 / 13.4	16 / 6	35 / 6	16 / 6	16 / 6	1050	16.0
	11	750	5.5	32 / 25	32 / 60	7.7 / 7.7	14.0 / 14.0	16 / 6	35 / 6	16 / 6	16 / 6	1125	16.0
	13	900	6.7	40 / 25	40 / 75	8.9 / 8.9	16.2 / 16.2	25 / 6	50 / 6	16 / 6	25 / 6	1350	16.0
	15	1000	6.7	40 / 25	50 / 75	9.8 / 9.8	17.8 / 17.8	25 / 6	50 / 10	16 / 6	25 / 6	1500	16.0
	17	1150	7.7	50 / 32	50 / 100	11.1 / 11.1	20.3 / 20.3	25 / 6	70 / 10	16 / 6	35 / 6	1725	16.0
	20	1350	9.1	60 / 32	75 / 125	13.0 / 13.0	26.0 / 26.0	35 / 10	70 / 16	16 / 6	35 / 6	2025	16.0
	24	1600	10.8	75 / 40	75 / 125	15.5 / 15.5	31.0 / 31.0	35 / 10	70 / 16	16 / 6	35 / 10	2400	25.0
1.5	8	550	6.9	32 / 25	32 / 60	9.7 / 9.7	17.7 / 17.7	16 / 6	35 / 10	16 / 6	16 / 6	1238	16.0
	9	600	6.9	32 / 25	40 / 60	10.4 / 10.4	18.9 / 18.9	16 / 6	35 / 10	16 / 6	16 / 6	1350	16.0
	10	680	8.3	40 / 25	40 / 75	11.5 / 11.5	20.9 / 20.9	25 / 6	50 / 10	16 / 6	25 / 6	1575	16.0
	11	750	8.3	40 / 25	50 / 75	12.0 / 12.0	21.8 / 21.8	25 / 10	50 / 10	16 / 6	25 / 6	1688	16.0
	13	900	10	50 / 32	50 / 100	13.5 / 13.5	24.6 / 24.6	35 / 10	70 / 16	16 / 6	35 / 6	2025	16.0
	15	1000	10	60 / 32	60 / 100	14.9 / 14.9	27.1 / 27.1	35 / 10	70 / 16	16 / 6	35 / 6	2250	16.0
	17	1150	11.6	75 / 40	75 / 120	18.2 / 18.2	33.1 / 33.1	50 / 16	70 / 16	25 / 6	35 / 6	2588	25.0
	20	1350	13.6	100 / 50	100 / 150	21.2 / 21.2	42.4 / 42.4	50 / 16	95 / 25	25 / 6	35 / 10	3038	35.0
	24	1600	16.2	100 / 60	120 / 175	25.3 / 25.3	50.5 / 50.5	50 / 16	95 / 35	25 / 6	35 / 10	3600	35.0
1.75	8	550	8.1	40 / 25	40 / 75	11.7 / 11.7	21.4 / 21.4	25 / 6	50 / 10	16 / 6	25 / 6	1444	16.0
	9	600	8.1	40 / 25	40 / 75	12.5 / 12.5	22.8 / 22.8	25 / 6	50 / 10	16 / 6	25 / 6	1575	16.0
	10	680	9.7	50 / 25	50 / 100	13.9 / 13.9	25.2 / 25.2	35 / 6	70 / 10	16 / 6	35 / 6	1838	16.0
	11	750	9.7	50 / 32	50 / 100	14.5 / 14.5	26.4 / 26.4	35 / 10	70 / 10	16 / 6	35 / 6	1969	16.0
	13	900	11.7	60 / 32	60 / 100	16.4 / 16.4	29.8 / 29.8	35 / 10	70 / 10	16 / 6	35 / 6	2363	16.0
	15	1000	11.7	75 / 40	75 / 120	18.0 / 18.0	32.7 / 32.7	50 / 10	70 / 16	25 / 6	35 / 6	2625	25.0
	17	1150	13.6	75 / 50	100 / 150	21.0 / 21.0	38.2 / 38.2	50 / 16	100 / 25	25 / 6	50 / 10	3019	35.0
	20	1350	15.9	100 / 50	100 / 175	24.4 / 24.4	48.9 / 48.9	50 / 16	70 / 25	25 / 6	50 / 10	3544	35.0
	24	1600	18.9	125 / 60	120 / 200	29.1 / 29.1	58.3 / 58.3	70 / 16	95 / 35	25 / 6	50 / 10	4200	35.0

(220V / 380V)

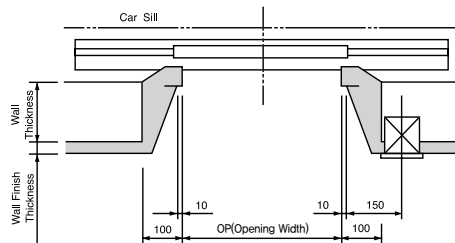
Speed (m/s)	Capacity		Motor Capacity (kW)	MCCB Capacity of Building(A)		Power Supply Capacity(kVA)		Lead-in Wire Size(mm <sup>2</sup> )		Earth Wire Size(mm <sup>2</sup> )		Heat Output (kcal/H)	Starting Power (kVA/set)
	Person	Load(kg)		Simplex	Duplex	Simplex	Duplex	Simplex	Duplex	Simplex	Duplex		
2.0	11	750	11	60 / 40	125 / 60	13 / 13.1	24 / 23.8	16 / 10	70 / 25	16 / 6	16 / 10	2250	24.3
	13	900	13.5	75 / 40	125 / 75	15 / 15.4	28 / 28.0	25 / 16	95 / 35	16 / 6	16 / 10	2700	27.7
	15	1000	13.5	75 / 50	150 / 100	17 / 17.1	31 / 31.1	25 / 16	95 / 50	16 / 6	16 / 16	3000	30
	17	1150	16	100 / 50	175 / 100	20 / 19.9	36 / 36.1	35 / 16	120 / 50	16 / 6	16 / 16	3450	34.2
	20	1350	18.5	100 / 60	175 / 100	22 / 21.6	39 / 39.3	35 / 16	120 / 50	16 / 6	16 / 16	4050	36.1
	24	1600	22	125 / 75	250 / 125	26 / 26.2	48 / 47.6	50 / 25	150 / 70	16 / 10	25 / 25	4800	42.7
2.5	11	750	13.5	75 / 50	150 / 75	16 / 16.2	29 / 29.5	25 / 16	95 / 35	16 / 6	16 / 10	2812.5	31.5
	13	900	17	100 / 50	150 / 100	19 / 19.0	35 / 34.5	35 / 16	120 / 50	16 / 6	16 / 16	3375	35.9
	15	1000	17	100 / 60	175 / 100	21 / 21.1	38 / 38.3	35 / 16	150 / 50	16 / 6	16 / 16	3750	39
	17	1150	20	125 / 60	200 / 125	24 / 23.9	44 / 43.6	50 / 16	150 / 70	16 / 6	16 / 25	4312.5	42.8
	20	1350	23	125 / 75	250 / 125	26 / 26.2	48 / 47.8	50 / 25	150 / 70	25 / 10	25 / 25	5062.5	46
	24	1600	27.5	150 / 100	300 / 150	31 / 31.4	57 / 57.2	70 / 25	185 / 70	25 / 10	25 / 25	6000	54.1



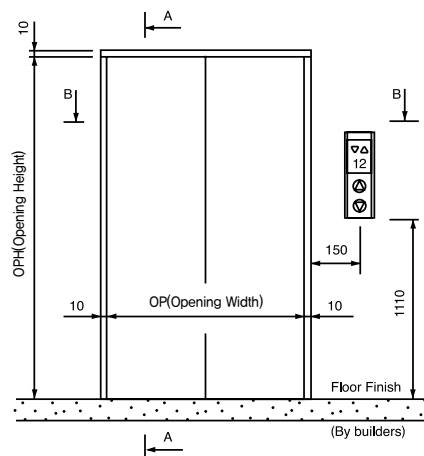
## Technical Data

### Narrow Jamb without Transom Panel

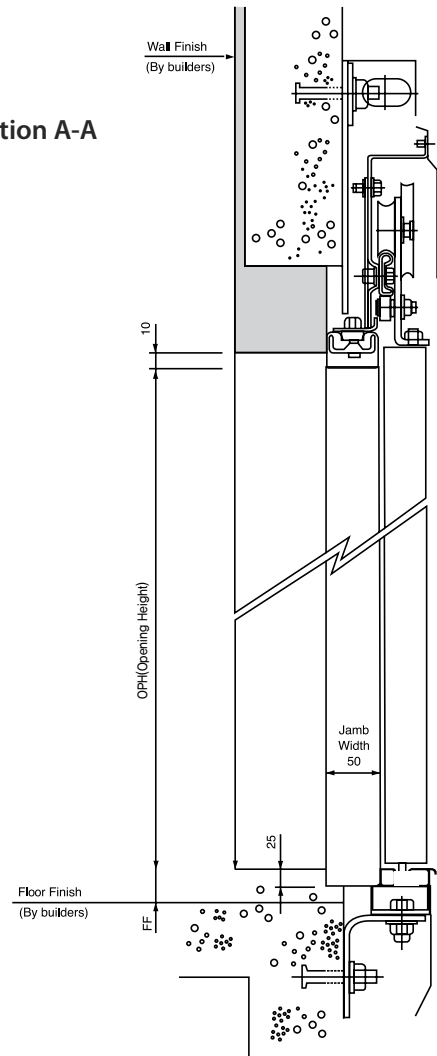
#### Section B-B



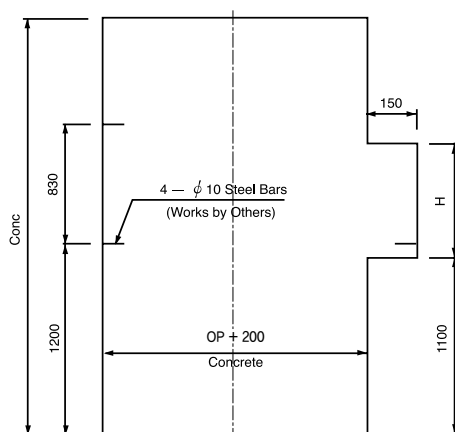
#### Front View of Entrance



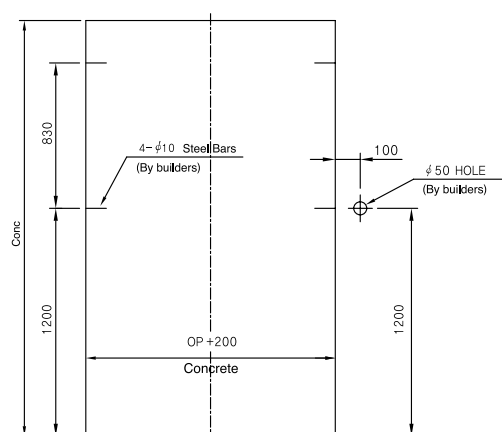
#### Section A-A



#### Building Structure Plan (Normal Button)



#### Building Structure Plan (Slim Type Button)

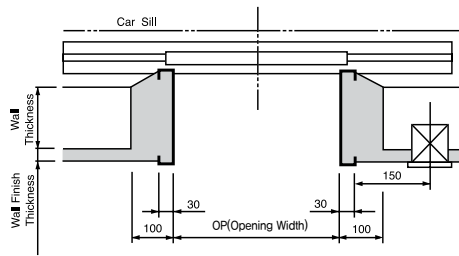


- Note**
1. «H» dimension in building structure plan depends upon the type of hall indicator selected.
  2. Unit : mm

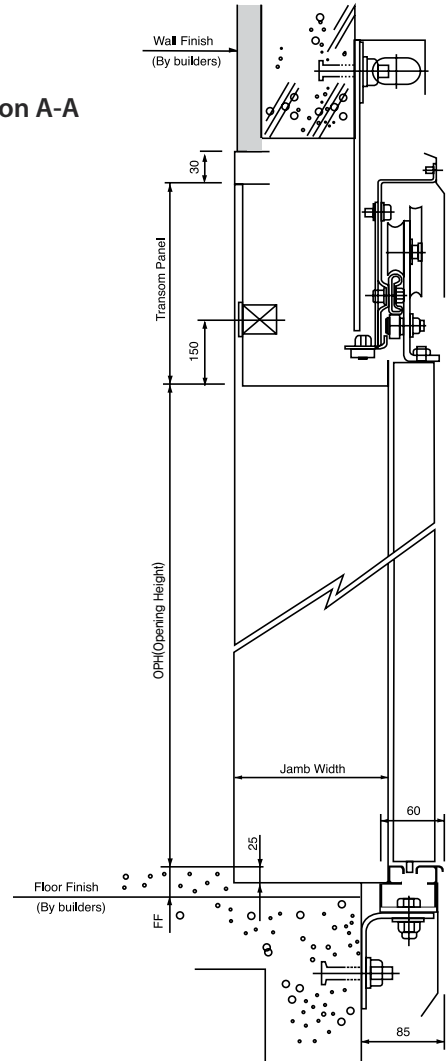
## Technical Data

### S-Type Wide Jamb with Transom Panel

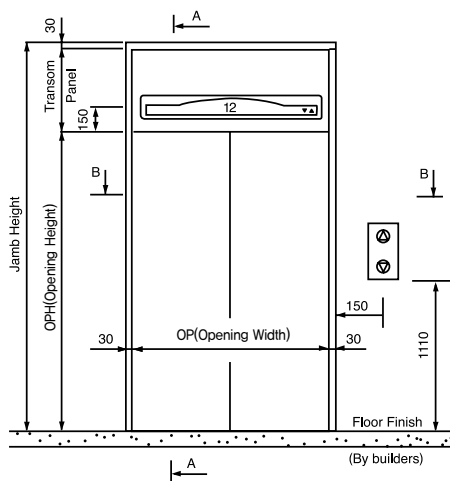
#### | Section B-B



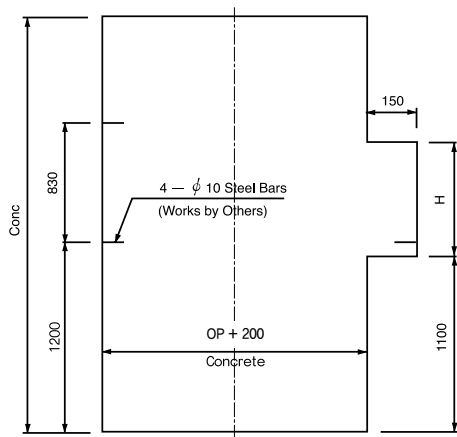
#### | Section A-A



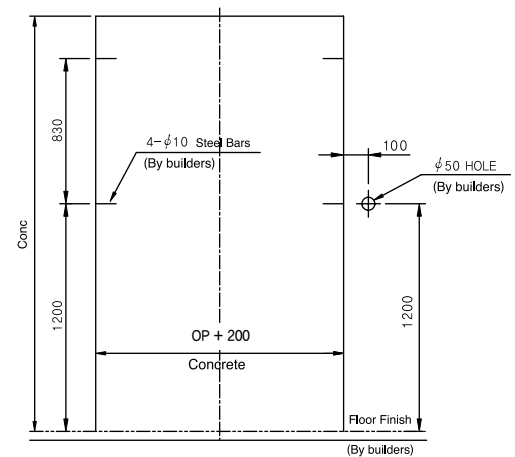
#### | Front View of Entrance



#### | Building Structure Plan (Normal Button)



#### | Building Structure Plan (Slim Type Button)

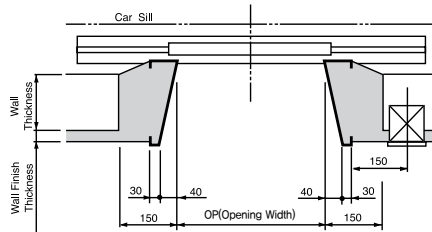


**Note** 1. «H» dimension in building structure plan depends upon the type of hall indicator selected.  
2. Unit : mm

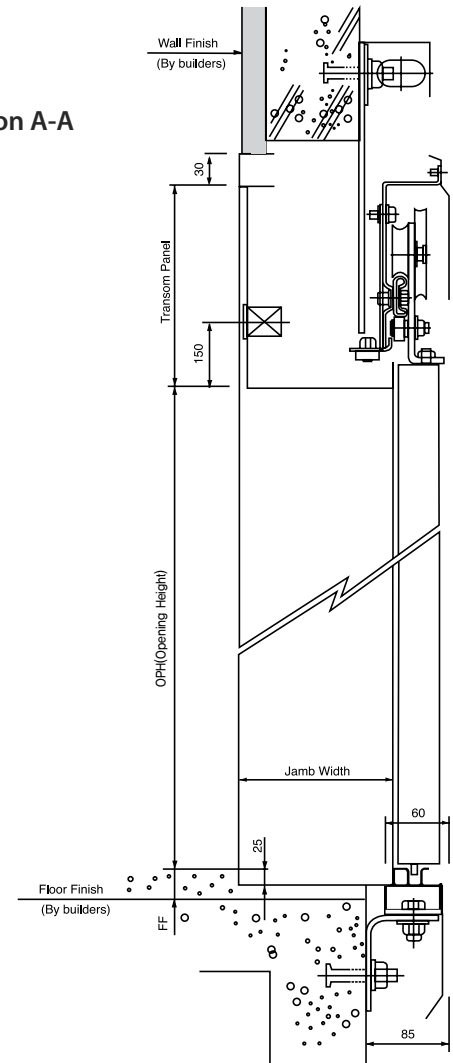
## Technical Data

### T-Type Jamb with Transom Panel

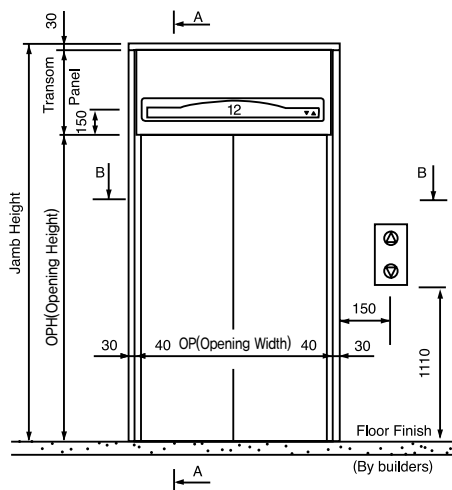
#### Section B-B



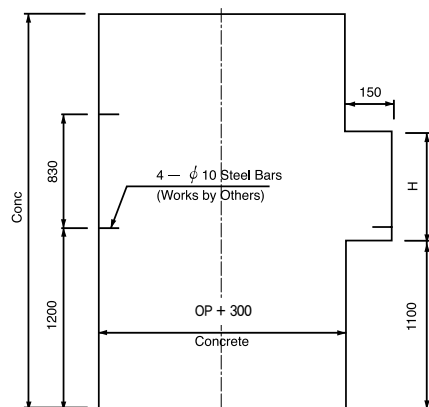
#### Section A-A



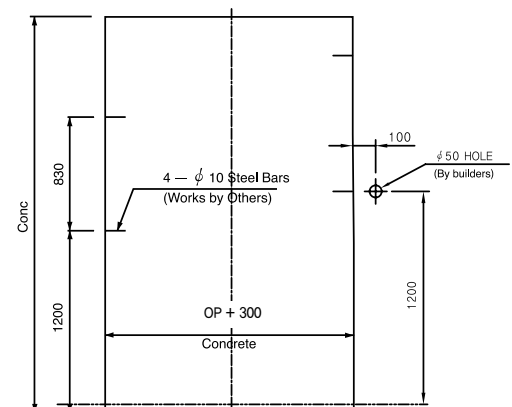
#### Front View of Entrance



#### Building Structure Plan (Normal Button)



#### Building Structure Plan (Slim Type Button)



- Note**
1. «H» dimension in building structure plan depends upon the type of hall indicator selected.
  2. Unit : mm

# Technical Data

## Technical Features

### I Operation Functions

● Standard ○ Option

Features	Description	
Safety Drive Operation	During normal operation, a malfunction is occurred suddenly but it's not serious, in this case, if the car is not in a door zone, then the car starts to run to the nearest floor, the car remains stop with door fully open and "Out of service" lamp.	●
Detection of Jammed Hall Button and Exclusion From Operation Service	If a hall button is jammed mechanically, the hall call will be automatically bypassed after being served once, until the problem is resolved.	●
Attendant Operation	The operating mode of an elevator can be changed from the normal automatic operation to the attendant service by an attendant switch.	●
Independent Operation	Key switch in the car operating panel will cancel any existing hall calls and hold the door open at the landing position. During independent operation, the car will respond only to respond car calls.	●
Anti-nuisance Operation	In case of substantial difference between the number of calls registered on the car operating panel and actual load in the elevator, the elevator prevents unnecessary operation by canceling all registered calls when it arrives at the nearest floor.	●
Car Call Cancellation	Allows cancellation of an incorrectly registered car call. If you push a wrong floor button in the car, you can cancel it by pressing the same button one more time.	●
Nearest Stop	When the car stops between floors due to mechanical malfunction. It will move to the nearest floor for the emergency escape.	●
Automatic Door Open & Close Time Adjustment	Door open and close are automatically adjusted depending on whether the car is a hall call or a car call to increase the operating efficiency.	●
Car Door Safety Edge	Extending the full height of the car door, this device enables the doors to return to the fully open position, should the door encounter a person or obstacle while closing.	●
Automatic Car Light & Fan Turn-off	Car illumination and fan are turned off automatically in case there is no hall call or car call to save energy.	●
By Pass Operation (80%)	If the actual load comes to more than 80% of the allowable maximum load, the elevator will not react to the calling signals from other passing floors.	●
Over Load (110% of rated load) Holding Stop	When the load of passengers exceeds the maximum capacity, a buzzer sounds and the elevator remains stopped at that floor. When the passengers get off, the buzzer will stop. Consequently elevator doors will close and operation continues.	●
Car Position Display	Car position display in car or hall, operated by car indicator or hall indicator.	●
Over Speed Governor	Located at the top of the hoist way, engages the governor rope, causing activation of the elevator safety device, should the elevator car accelerate beyond the predetermined maximum speed in the "up and down" direction.	●
Emergency Lighting Feature	In case of power failure, the emergency light will turn on and maintain a period of time.	●
Changeable Reference Floor	The reference floor can be changed by the customer.	●
Slow Running when Checking and Repairing	When checking and repairing, the elevator will operate slowly to ensure the worker's safety.	●

# Technical Data

## Technical Features

### I Operation Functions

● Standard ○ Option

Features	Description	
Terminal Limit Switches	Prevent the elevator from traveling beyond a terminal landing, in dependent of the functioning of the operating device.	●
Interphone	Provide emergency communication between passengers in the car, the machine room or building personnel in a security or maintenance room.	●
Car Chime	Arrival signal.	●
Hall Button Jam	When hall button continues to be active long time, a car could be ignore the hall call.	●
ERO&MSK Operation	ERO: Refer to GB7588-2003 14.2.1.4, MSK for SIGMA.	●
Emergency Firemen Service	In case of fire, firemen can use the elevator which is stopped at the specified floor in order to support firemen for fire-fighting.	○
Emergency Fire Return Operation	In case of fire, every car should be returned to the specified floor in order to evacuate passengers to safety.	○
Automatic Rescue Device(ALP)	In case of power failure, when the building has no emergency power supply, the elevator is sent to the nearest floor by DC power of battery to prevent passengers from being trapped in the car.	○
Door Nudging	When the doors remain open for more than the fixed door open time (approx. 20 seconds), this feature closes the doors at reduced closing speed with buzzer sounding.	○
Supervisory Interface and EMS	CRT interface and DOS100 interface is applicable to SI210 controller only.(need I/F board)	○
Earthquake	The earthquake sensor detects whether the earthquakes occur or not. When earthquakes occur, the device forces the elevator to stop at the nearest floor with door fully open, and the elevator can't operate any more.	○
Cancel Hall Chime	To cancel hall Chime in night, in order to keep quiet for people.	○
Voice Synthesizer	MICOM to the elevators on the synthesized speech The ability to automatically broadcast the status information.	○
Hall Call Canceling	This feature is available to simplex operation only. - Allows cancellation of an incorrectly registered hall call. - At landing floor, this operation is not available for door re-opening.	○
Night Noise Restriction	A timer or RTC (Real Time Clock) activates this feature. When RTC reaches designated time, chime and/or gong is deactivated.	○
Auto Changed Basement	The car serves the basement. This may be one or more basement floors. A timer or RTC (Real Time Clock) activates this feature. When RTC reaches designated time, basement floor can be changed automatically.	○
Canceling Group Operation	A car can be separated from two-car group operation by a switch or EMS command and be operated standalone.	○
Wait with Opened Door	A car Wait with Opened Door at basement floors.	○
Through Type	Opened front door and rear Door.	○
Generator Operation	When power off, receive power from generator, and operate according to procedure of Generator.	○
Re-leveling	Adjust leveling between landing sill and Car sill.	○